

# Storen Weed Control and Crop Safety

## Arlington, WI 2023

### Trial Information

Trial Sponsor(s): Syngenta

Objective: Evaluate the residual weed control and crop safety of Storen compared to competitor corn herbicides

Crop: Corn

Hybrid: NK9653-5222-EZ1

Weed species (pressure): giant foxtail (high-very high)  
woolly cupgrass (high-very high)

Herbicide Application(s): PRE – 4/28  
POST – 5/30 (V2/V3 corn)

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For the full report see trial #23-ARL-CN11 in the [2023 Wisconsin Weed Science Research Report](#)



**Cropping Systems Weed Science**  
UNIVERSITY OF WISCONSIN-MADISON

**syngenta**

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Trt #	Herbicide (rate acre <sup>-1</sup> )	Wolly Cupgrass (%)				Giant Foxtail (%)			Yield <sup>b</sup> bu acre <sup>-1</sup>	
		5/30	6/13	6/28	10/19	5/30	6/13	6/28		
1	Untreated Check	0	0	0	0	0	0	0	9 g	
<b>One-Pass – PRE (4/28)</b>										
2	Storen (2.1 qt)	86	-	59	43	93	-	73	151 bcd	
3	Storen (2.4 qt)	90	-	58	46	93	-	67	152 bcd	
4	Acuron Flexi (2.25 qt)	80	-	51	46	91	-	71	127 de	
5	Resicore XL (2.5 qt)	93	-	63	49	97	-	79	166 bc	
6	Resicore XL (3 qt)	94	-	70	51	98	-	86	176 ab	
7	Trivolt SC (17.5 fl oz)	72	-	46	50	83	-	53	130 cde	
8	Trivolt SC (20 fl oz)	79	-	51	52	87	-	61	149 bcd	
9	Maverick (24 fl oz)	63	-	30	34	69	-	31	70 f	
10	Maverick (32 fl oz)	68	-	60	38	76	-	38	100 e	
<b>One-Pass – POST (5/30)</b>		<b>POST</b>				<b>POST</b>				
14	Acuron GT (3.75 pt) + NIS (0.25% v/v) + AMS <sup>d</sup>	0	99	99	84	0	99	99	203 a	
<b>Two-Pass – PRE (4/28) fb POST (5/30)</b>		<b>POST</b>				<b>POST</b>				
11	Storen (1.05 qt) <b>fb</b> Storen (1.05 qt) + Roundup PM3 (28 fl oz) + AMS <sup>d</sup>	67	99	95	88	80	98	95	211 a	
12	Storen (1.2 qt) <b>fb</b> Storen (1.2 qt) + Roundup PM3 (28 fl oz) + AMS <sup>d</sup>	64	99	96	90	84	99	95	211 a	
13	Storen (1.2 qt) <b>fb</b> Halex GT (4 pt) + Status (5 oz) + NIS (0.25% v/v) + AMS <sup>d</sup>	73	99	95	91	85	99	95	206 a	
15	Calibra (1.4 qt) <b>fb</b> Acuron GT (3.75 pt) + NIS (0.25% v/v) + AMS <sup>d</sup>	63	100	96	86	83	98	96	206 a	
		LSD ( $\alpha=0.10$ )	10	ns	9	8	5	ns	11	25
		p value	<.001	0.279	<.001	<.001	<.001	0.592	<.001	<0.001

<sup>a</sup>Visual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

<sup>b</sup>Yield values with the same letter are not significantly different.

<sup>c</sup>10/19 ratings were a combination of woolly cupgrass, giant foxtail, and other minor grass species present in the trial.

<sup>d</sup>AMS liquid applied at 2.5% v/v

# Storen Weed Control and Crop Safety

## Arlington, WI 2023

Plot pictures taken on 5/30  
32 days after the PRE application

The number in the upper right-hand corner is the average % woolly cupgrass control of 4 replications

**32 days after PRE (5/30)**

**Untreated Check**

**0%**



32 days after PRE (5/30)

PRE: 2.1 qt Storen

86%



32 days after PRE (5/30)

PRE: 2.4 qt Storen

90%



**32 days after PRE (5/30)  
PRE: 2.25 qt Acuron Flexi**

**80%**



32 days after PRE (5/30)

PRE: 2.5 qt Resicore XL

93%



32 days after PRE (5/30)

PRE: 3 qt Resicore XL

94%



**32 days after PRE (5/30)  
PRE: 17.5 fl oz Trivolt SC**

**72%**



**32 days after PRE (5/30)**

**PRE: 20 fl oz Trivolt SC**

**79%**



**32 days after PRE (5/30)**

**PRE: 24 fl oz Maverick**

**63%**



2

**32 days after PRE (5/30)**

**PRE: 32 fl oz Maverick**

**68%**



32 days after PRE (5/30)

PRE: 1.05 qt Storen

67%



32 days after PRE (5/30)

PRE: 1.2 qt Storen

69%



32 days after PRE (5/30)

PRE: 1.4 qt Calibra

63%



# Storen Weed Control and Crop Safety

## Arlington, WI 2023

Plot pictures taken on 6/13

46 days after the PRE application  
13 days after the POST application

The number in the upper right-hand corner is the average % woolly cupgrass control of 4 replications

**46 days after PRE (6/13)**

**0%**

**Untreated Check**



46 days after PRE (6/13)

PRE: 2.1 qt Storen



46 days after PRE (6/13)

PRE: 2.4 qt Storen



**46 days after PRE (6/13)  
PRE: 2.25 qt Acuron Flexi**



46 days after PRE (6/13)

PRE: 2.5 qt Resicore XL



46 days after PRE (6/13)

PRE: 3 qt Resicore XL



**46 days after PRE (6/13)  
PRE: 17.5 fl oz Trivolt SC**



**46 days after PRE (6/13)**

**PRE: 20 fl oz Trivolt SC**



**46 days after PRE (6/13)**

**PRE: 24 fl oz Maverick**



**46 days after PRE (6/13)**

**PRE: 32 fl oz Maverick**



13 days after POST (6/13)

99%

POST: 3.75 pt Acuron GT + NIS + AMS



13 days after POST (6/13)

PRE: 1.05 qt Storen *fb*

POST: 1.05 qt Storen + 28 Roundup PowerMAX 3 + AMS

99%



13 days after POST (6/13)

PRE: 1.2 qt Storen *fb*

POST: 1.2 qt Storen + 28 Roundup PowerMAX 3 + AMS

99%



13 days after POST (6/13)

PRE: 1.2 qt Storen *fb*

POST: 4 pt Halex GT + 5 oz Status + NIS + AMS

99%



13 days after POST (6/13)

PRE: 1.4 qt Calibra *fb*

POST: 3.75 pt Acuron GT + NIS + AMS

100%



# Storen Weed Control and Crop Safety

## Arlington, WI 2023

Plot pictures taken on 6/28

61 days after the PRE application  
29 days after the POST application

The number in the upper right-hand corner is the average % woolly cupgrass control of 4 replications

**61 days after PRE (6/28)**

**Untreated Check**

**0%**



61 days after PRE (6/28)

PRE: 2.1 qt Storen

59%



**61 days after PRE (6/28)**

**PRE: 2.4 qt Storen**

**58%**



**61 days after PRE (6/28)  
PRE: 2.25 qt Acuron Flexi**

**51%**



**61 days after PRE (6/28)**

**PRE: 2.5 qt Resicore XL**

**63%**



**61 days after PRE (6/28)**

**PRE: 3 qt Resicore XL**

**70%**



**61 days after PRE (6/28)  
PRE: 17.5 fl oz Trivolt SC**

**46%**



**61 days after PRE (6/28)**

**PRE: 20 fl oz Trivolt SC**

**51%**



**61 days after PRE (6/28)**

**PRE: 24 fl oz Maverick**

**30%**



**61 days after PRE (6/28)**

**PRE: 32 fl oz Maverick**

**60%**



**29 days after POST (6/28)**

**POST: 3.75 pt Acuron GT + NIS + AMS**

**99%**



29 days after POST (6/28)

PRE: 1.05 qt Storen *fb*

POST: 1.05 qt Storen + 28 Roundup PowerMAX 3 + AMS

95%



29 days after POST (6/28)

PRE: 1.2 qt Storen *fb*

POST: 1.2 qt Storen + 28 Roundup PowerMAX 3 + AMS

96%



29 days after POST (6/28)

PRE: 1.2 qt Storen *fb*

POST: 4 pt Halex GT + 5 oz Status + NIS + AMS

95%



29 days after POST (6/28)

PRE: 1.4 qt Calibra *fb*

POST: 3.75 pt Acuron GT + NIS + AMS

96%



# Storen Weed Control and Crop Safety

## Arlington, WI 2023

Plot pictures taken on 10/19  
Near time of corn harvest

The number in the upper right-hand corner is the average % annual grass control of 4 replications

# Corn Harvest (10/19)

## Untreated Check

0%



Corn Harvest (10/19)

PRE: 2.1 qt Storen

43%



**Corn Harvest (10/19)**  
**PRE: 2.4 qt Storen**

**46%**



Corn Harvest (10/19)

PRE: 2.25 qt Acuron Flexi

46%



Corn Harvest (10/19)  
PRE: 2.5 qt Resicore XL

49%



Corn Harvest (10/19)  
PRE: 3 qt Resicore XL

51%



Corn Harvest (10/19)  
PRE: 17.5 fl oz Trivolt SC

50%



Corn Harvest (10/19)  
PRE: 20 fl oz Trivolt SC

52%



Corn Harvest (10/19)  
PRE: 24 fl oz Maverick

34%



Corn Harvest (10/19)  
PRE: 32 fl oz Maverick

38%



Corn Harvest (10/19)

POST: 3.75 pt Acuron GT + NIS + AMS

84%



Corn Harvest (10/19)

PRE: 1.05 qt Storen *fb*

POST: 1.05 qt Storen + 28 Roundup PowerMAX 3 + AMS

88%



Corn Harvest (10/19)

PRE: 1.2 qt Storen *fb*

POST: 1.2 qt Storen + 28 Roundup PowerMAX 3 + AMS

90%



Corn Harvest (10/19)

PRE: 1.2 qt Storen *fb*

POST: 4 pt Halex GT + 5 oz Status + NIS + AMS

91%



Corn Harvest (10/19)

PRE: 1.4 qt Calibra *fb*

POST: 3.75 pt Acuron GT + NIS + AMS

86%

